POWER OF ATTORNEY AND CORRESPONDENCE ADDRESS INDICATION FORM

	P1O/SB/81 (01-06) MODIFIE
Application Number:	10/553,028
Filing Date:	October 11, 2005
First Named Inventor:	Michael P. BELMARES
Art Unit:	1654
Examiner Name:	Unknown
Attorney Docket Number:	ARBV:003US

Examiner Name:		Unknown				
			Attorney Docke	ocket Number: ARBV:003US		
I hereby revoke all previous powers of attorney given in the above-identified application.						
A Power of	f Att	orney is submitted herewith.				
OR						
🛚 I hereby app	poin	the practitioners associated w	ith the Customer	Number: 324	25	
		s) or agent(s) to prosecute the a t and Trademark Office connec		ified above, and to	transact all busine	ss in the
Please recogniz	e or	change the correspondence ad-	dress for the abo	ve-identified appl	ication to:	
OR 🖂	The	address associated with Custo	mer Number:	32425		
Firm or Individual Name						
Address						
City				State	Zip	
Country						
Telephone				Email		
I am the:						
Applicant/l	Inve	ntor.				
		ord of an interest. See 37 CFR r 37 CFR 3.73(b) is enclosed.		96)		
		SIGNATURE OF APPLIC	CANT OR ASSI	GNEE OF RECOR	ND .	
Signature		ft-1	! L			
Name		PETER S	Lu			
Title and Company	Art	oor Vita Corporation		Telephone		
Date		04/24/07		408	585 390	
		the inventors or assignees of reco		interest or their repr	resentative(s) are rec	uired. Submit
*Total of		forms are submitted.				

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Michael P. BELMARES, Peter S. LU and Jonathan David GARMAN			
Application No./Patent No. 10/553,028 Filed/Issue Date: October 11, 2005			
Entitled: MODULATION OF MUC1 MEDIATED SIGNAL TRANSDUCTION			
	nee, e.g., corporation, partnership, vernment agency, etc.)		
states that it is:			
$1. \ \square$ the assignee of the entire right, title, and interest; or			
2. \boxtimes an assignee of less than the entire right, title and interest.			
in the patent application/patent identified above by virtue of either:			
A. An assignment from the inventor(s) of the patent application/patent identified aborthe United States Patent and Trademark Office at Reel, Frame, or for	ove. The assignment was recorded in or which a copy thereof is attached.		
OR			
B. A chain of title from the inventor(s), of the patent application/patent identified ab follows:	B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignce as follows:		
To: To: The document was recorded in the United States Patent and Trademark Of Reel, Frame, or for which a copy thereof is attached.			
2. From: To:			
The document was recorded in the United States Patent and Trademark Of Reel, Frame, or for which a copy thereof is attached.	fice at		
3. From: To:			
The document was recorded in the United States Patent and Trademark Of Reel, Frame, or for which a copy thereof is attached.	fice at		
Additional documents in the chain of title are listed on a supplemental sheet.			
As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of ti assignee was, or concurrently is being submitted for recordation pursuant to 37 C [NOTE: A separate copy (i.e., a true copy of the original assignment document(s Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in MPEP 302.08]	FR 3.11.)) must be submitted to Assignment		
The undersigned (whose title is supplied below) is authorized to act on behalf of the ass	ignee.		
Monica Que La/2	June 11, 2008		
Signature	Date		
Monica A. De La Paz, Reg. No. 54,662	(512) 474-5201		
Printed or Typed Name	Telephone Number		
Attorney	ARBV:003US		
Title	File Code		

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to ARBOR VITA CORPORATION (the "Assignee"), having a place of business at 772 Lucerne Drive, Sunnyvale, California 94085, their entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 10/553,028 which has been filed on October 11, 2005 and is entitled "MODULATION OF MUC1 MEDIATED SIGNAL TRANSDUCTION", is a 371 Nationalization of PCT/US2004/011195 filed 04/1204 which claims priority to US Provisional Application No. 60/524,188 filed November 21, 2003, which claims priority to US Provisional Application No. 60/502_111 filed September 11, 2003, which claims priority to US Provisional Application No. 60/475,595 filed June 4, 2003, which claims priority to US Provisional Application No. 60/467,728 filed May 2, 2003, which claims priority to US Provisional Application No. 60/462,111 filed April 11, 2003, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States:

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned:

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Signature: Michael P. Belmaue Date: 4/24/07 Name: Michael P. Belmares
STATE OF <u>CALIFORNIA</u> COUNTY OF <u>SAATA CLARA</u>
BEFORE ME, the undersigned authority, on this <code></code>
SUNITA SINCH COMM. 8 1527555 Notary of Cohsular Officer. [SEAL] SUNITA SINCH COMM. 8 1527555 Notary of Cohsular Officer.
Signature: Date: 4/24/07 Name: Peter S. Lu
STATE OF CALIFORNIA COUNTY OF SANTA CLARA
BEFORE ME, the undersigned authority, on this 24 day of APRIL 2007 personally appeared Peter S. Lu, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.
COMM B. CAUTONIN (SEAL) Notary or Consular Officer SAMING FURA COUNTY SAMING FURA COUNTY

Signature: Date:
Name: Jonathan David Garman
STATE OF California COUNTY OF Santa Clare
BEFORE ME, the undersigned authority, on this 24 day of $ARRIL$, 2007 personally appeared Jonathan David Garman, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of
his/her own free will for the purposes and consideration therein expressed.
SUNITA SINGH Z
COMM. CALIFORNIA Notary or Consular Officer

1)//

PTO/SB/81 (01-06) MODIFIED

	Application Number:				
POWER OF ATTORNEY	Filing Date:	October 11, 2005			
AND	First Named Inventor:	Michael P. BELMARES			
CORRESPONDENCE ADDRESS INDICATION FORM	Art Unit:	1654			
INDICATION FORM	Examiner Name:	Unknown			
	Afterney Docket Number:	ARBV:003US			
I hereby revoke all previous powers of atto	rney given in the above-i	identified application.			
☐ A Power of Attorney is submitted herewith.					
OR					
I hereby appoint the practitioners associated w	vith the Customer Number:	32425			
as my/our attorney(s) or agent(s) to prosecute the United States Patent and Trademark Office conne		, and to transact all business in the			
Please recognize or change the correspondence ad	idress for the above-identific	d application to:			
The address associated with Custo	omer Number: 32425				
Firm or Individual Name					
Address					
City	State	Zip			
Country					
Telephone	Email				
I am the:					
Applicant/Inventor.					
_ ::					
Assignce of record of an interest. See 37 CFI					
Statement under 37 CFR 3,73(b) is enclosed.	(Form PTO/SB/90)				
SIGNATURE OF APPLI	ICANT OR ASSIGNEE OF R	ECORD			
Signature Family Jacks					
Name PANELA D MEINIGLE					
Title and Company Title and Company	Telephone	617-6325492			
Date 540.07					
NOTE: Signatures of all the inventors or assignees of rec multiple forms if more than one signature is required, see be		eir representative(s) are required. Submit			
*Total offorms are submitted.		WAR OF FEEL WAR IN THE PARTY OF			

Dana-Farber Cancer Institute, Inc. Certificate of Corporate Authority

I, Richard S. Boskey, Assistant Secretary of Dana-Farber Cancer Institute, Inc., a Massachusetts not-for-profit corporation with its usual place of business at 44 Binney Street in Boston, Massachusetts (the "Corporation"), hereby certify that Pamela D. Ariniello, acting in her capacity as Associate General Counsel for Intellectual Property of the Corporation, is authorized to act on behalf of and bind the Corporation as to the matters specified below:

Copyright, Patent and Trademark Applications and Related Documents

Executed this 31st day of March, 2006.

Richard S. Boskey Assistant Secretary

Dana-Farber Cancer Institute, Inc.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Donald W. KUFE				
Application No./Patent No. 10/553,028 Filed/Issue Date: Octo	Application No./Patent No. 10/553,028 Filed/Issue Date: October 11, 2005			
Entitled: MODULATION OF MUCI MEDIATED SIGNAL TRANSDUCTION				
Dana-Farber Cancer Institute, Inc. , a corporation (Name of Assignee) (Type of Assignee) (Type of Assignee)	signee, e.g., corporation, partnership,			
states that it is:	government agency, etc.)			
1. M the assignee of the entire right, title, and interest; or				
2. \boxtimes an assignee of less than the entire right, title and interest.				
in the patent application/patent identified above by virtue of either:				
A. 🔀 An assignment from the inventor(s) of the patent application/patent identified al the United States Patent and Trademark Office at Reel, Frame, or				
OR				
B. A chain of title from the inventor(s), of the patent application/patent identified a follows:	bove, to the current assignee as			
From: To: To: To: The document was recorded in the United States Patent and Trademark C Reel, Frame, or for which a copy thereof is attached.	Office at			
2. From: To: The document was recorded in the United States Patent and Trademark C	office at			
Reel, Frame, or for which a copy thereof is attached.				
3. From: To: The document was recorded in the United States Patent and Trademark Office at				
Reel, Frame, or for which a copy thereof is attached.				
Additional documents in the chain of title are listed on a supplemental sheet.				
As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of assignee was, or concurrently is being submitted for recordation pursuant to 37 [NOTE: A separate copy (i.e., a true copy of the original assignment documental District Company (i.e., a true copy of the original assignment documental District Company (i.e., a true copy of the company) in the consecuted of the company	CFR 3.11. (s)) must be submitted to Assignment			
Division in accordance with 37 CFR Part 3, if the assignment is to be recorded MPEP 302.08]	m me records of the USPTO. See			
The undersigned (whose title is supplied below) is authorized to act on behalf of the as	signee.			
Monica De La	June 11, 2008			
Signature	Date			
Monica A. De La Paz, Reg. No. 54,662 Printed or Typed Name	(512) 474-5201 Telephone Number			
••	•			
Attorney Title	ARBV:003US File Code			

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, does hereby:

SELL, ASSIGN AND TRANSFER to DANA-FARBER CANCER INSTITUTE, INC. (the "Assignee"), having a place of business at 44 Binney Street, Boston, Massachusetts 02115. their entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 10/553,028 which has been filed on October 11, 2005 and is entitled "MODULATION OF MUCI MEDIATED SIGNAL TRANSDUCTION", is a 371 Nationalization of PCT/US2004/011195 filed April 12, 2004 which claims priority to US Provisional Application No. 60/524,188 filed November 21, 2003, which claims priority to US Provisional Application No. 60/502,111 filed September 11, 2003, which claims priority to US Provisional Application No. 60/475,595 filed June 4, 2003, which claims priority to US Provisional Application No. 60/467,728 filed May 2, 2003, which claims priority to US Provisional Application No. 60/462,111 filed April 11, 2003, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations; assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee, shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements:

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.
Signature: Date: 5/8/07 Name: Donald W. Kufe
STATE OF MA. SUFFOLK
BEFORE MB, the undersigned authority, on this \(\frac{\text{M}}{2} \) day of \(\frac{\text{MMM}}{2} \) 2007, personally appeared Donald W. Kufe, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.
(SEAL) Notary or Consulter Officer City 08-08-08
[SEAL]

	PTO/SB/81 (01-06) MODIFIEL
Application Number:	10/553,028
Filing Date:	October 11, 2005
First Named Inventor:	Michael P. BELMARES
Art Unit:	1654
Examiner Name:	Unknown
Attorney Docket Number:	ARBV:003US

POWE	ER OF ATTORN	ÆΥ	Thing Dute.			O000001 11, 20	303	
AND		First Named I	inventor:		Michael P. BELMARES			
CORRESPONDENCE			Art Unit:			1654		
IND	ICATION FORM	4	Examiner Na	me:	Unknown			
			Attorney Docl	ket Number:	\Box	ARBV:003US	3	
I hereby revo	oke all previous	powers of atto	rney given in	the above-id	lentifi	ed applicati	ion.	
A Power o	of Attorney is subm	nitted herewith.						
OR								
⊠ I hereby ap	point the practition	ners associated w	ith the Custom	er Number:	3242	.5		
	ney(s) or agent(s) atent and Tradem				and to t	transact all bu	ısiness	in the
Please recogniz	ze or change the co	orrespondence ad	ldress for the at	ove-identified	applica	ation to:		
OR 🖂	The address associated	ciated with Custo	mer Number:	32425				
Firm or Individual Name								
Address								
City				State		Zip	<u>, </u>	
Country								
Telephone				Email	\mathbb{L}			
I am the:								
Applicant/Inventor.								
Assignee of record of an interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)								
SIGNATURE OF APPLICANT OR ASSIGNEE OF RECORD								
Signature	Bart	8New	leQ					
Name	Bart	g. News	and, V.	P., Intella	ectu	al Prop	zeA.	٧
Fitle and Company	Vice Pro Genzyme Corpora	esident-I	:P	Telephone		81 434 -		
Date	June 11	,2008						
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.								
*Total of	forms are	e submitted.						

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Albert A. JECMINEK, Naoki AGATA, and Surender KHARBANDA			
Application No./Patent No. 10/553,028 Filed/Issue Date: October 11, 2005			
Entitled: MODULATION OF MUCI MEDIATED SIGNAL TRANSDUCTION			
	ignee, e.g., corporation, partnership, overnment agency, etc.)		
states that it is:			
$1. \ \square$ the assignee of the entire right, title, and interest; or			
2. an assignee of less than the entire right, title and interest.			
in the patent application/patent identified above by virtue of either:			
A. An assignment from the inventor(s) of the patent application/patent identified ab the United States Patent and Trademark Office at Reel, Frame, or 1	ove. The assignment was recorded in for which a copy thereof is attached.		
OR			
B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:			
From: To: To: The document was recorded in the United States Patent and Trademark O Reel, Frame, or for which a copy thereof is attached.	ffice at		
2. From: To:			
The document was recorded in the United States Patent and Trademark O Reel, Frame, or for which a copy thereof is attached.	ffice at		
3. From: To:			
The document was recorded in the United States Patent and Trademark O Reel, Frame, or for which a copy thereof is attached.	ffice at		
Additional documents in the chain of title are listed on a supplemental sheet.			
As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of t assignce was, or concurrently is being submitted for recordation pursuant to 37 [NOTE: A separate copy (i.e., a true copy of the original assignment document	CFR 3.11.		
[NOTE: A separate cupy [Le., a true cupy of the Original assignment document.] Division in accordance with 37 CFR Part 3, if the assignment is to be recorded it MPEP 302.08]			
The undersigned (whose title is supplied below) is authorized to act on behalf of the ass	signee.		
Monica Que La VIZ	June 11, 2008		
Signature	Date		
Monica A. De La Paz, Reg. No. 54,662	(512) 474-5201		
Printed or Typed Name	Telephone Number		
Attorney	ARBV:003US		
Title	File Code		

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to GENZYME CORPORATION (the "Assignee"). having a place of business at 500 Kendall Street, Cambridge, Massachusetts 02142, their entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 10/553,028 which has been filed on October 11, 2005 and is entitled "MODULATION OF MUC1 MEDIATED SIGNAL TRANSDUCTION", is a 371 Nationalization of PCT/US2004/011195 filed April 12, 2004 which claims priority to US Provisional Application No. 60/524,188 filed November 21, 2003, which claims priority to US Provisional Application No. 60/502,111 filed September 11, 2003, which claims priority to US Provisional Application No. 60/475,595 filed June 4, 2003, which claims priority to US Provisional Application No. 60/467,728 filed May 2, 2003, which claims priority to US Provisional Application No. 60/462,111 filed April 11, 2003, such application and all divisional, continuing, substitute. renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States:

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements:

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.
Signature: Clbestal cumik Date: 4-4-07 Name: Albert A. Jeeminek STATE OF Alizun A COUNTY OF PLEA
BEFORE ME, the undersigned authority, on this day of hepel 2007, 2007 personally appeared Albert A. Jeeminek, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration transpin expressed.
MELISSA F. DIAZ NOTARY PUBLIC - ARIZONA PINA COUNTY My Commission Expires December 15, 2009 MELISSA F. DIAZ Notary or Certsular Officer Notary or Certsular Officer
Signature: Date: Pare: Naoki Agata
STATE OF
BEFORE ME, the undersigned authority, on this day of, 2007 personally appeared Naoki Agata, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free unit for the propose and consideration therein represented

Notary or Consular Officer

[SEAL]

Signature: Name: Surender Kharbanda	Date:
Name: Surender Kharbanda	
STATE OF	
personally appeared Surender Kharband	authority, on thisday of, 2007 a, known to me to be the person whose name is a acknowledged to me that he/she executed the same of consideration therein expressed.
[SEAL]	Notary or Consular Officer

Date:

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to GENZYME CORPORATION (the "Assignee"), having a place of business at 500 Kendall Street, Cambridge, Massachusetts 02142, their entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 10/553,028 which has been filed on October 11, 2005 and is entitled "MODULATION OF MUC1 MEDIATED SIGNAL TRANSDUCTION", is a 371 Nationalization of PCT/US2004/011195 filed April 12, 2004 which claims priority to US Provisional Application No. 60/524.188 filed November 21, 2003, which claims priority to US Provisional Application No. 60/502,111 filed September 11, 2003, which claims priority to US Provisional Application No. 60/475,595 filed June 4, 2003, which claims priority to US Provisional Application No. 60/467,728 filed May 2, 2003, which claims priority to US Provisional Application No. 60/462,111 filed April 11, 2003, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States:

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COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements.

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Signature:	Date:
Name: Albert A. Jecminek	
STATE OF	_
personally appeared Albert A. J. subscribed to the foregoing instrum	igned authority, on this day of, 2007 cominek, known to me to be the person whose name is nent and acknowledged to me that he/she executed the same of ses and consideration therein expressed.
[SEAL]	Notary or Consular Officer
Name. Noaki Agata	Spott December 4, 2007
personally appeared Naoki Agata,	igned authority, on this 4th day of <u>December</u> , 2007 known to me to be the person whose name is subscribed to the edged to me that he/she executed the same of his/her own free tion therein expressed.
	Witness Naoto Boashi

Signature:	Date:
Name: Surender Kharbanda	
STATE OF	
COUNTY OF	
personally appeared Surender Kharba	l authority, on this day of, 2007 ada, known to me to be the person whose name is and acknowledged to me that he/she executed the same of d consideration therein expressed.
	Notary or Consular Officer

[SEAL]

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to GENZYME CORPORATION (the "Assignee"). having a place of business at 500 Kendall Street, Cambridge, Massachusetts 02142, their entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 10/553,028 which has been filed on October 11, 2005 and is entitled "MODULATION OF MUC1 MEDIATED SIGNAL TRANSDUCTION", is a 371 Nationalization of PCT/US2004/011195 filed April 12, 2004 which claims priority to US Provisional Application No. 60/524.188 filed November 21, 2003, which claims priority to US Provisional Application No. 60/502,111 filed September 11, 2003, which claims priority to US Provisional Application No. 60/475,595 filed June 4, 2003, which claims priority to US Provisional Application No. 60/467.728 filed May 2, 2003, which claims priority to US Provisional Application No. 60/462,111 filed April 11, 2003, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States:

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee:

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned:

COVENANT, when requested and at the expense of the Assignee, to carry out in good aith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements.

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Signature: Name: Albert A. Jecminek	Date:
STATE OF	
personally appeared Albert A. Jecn	ed authority, on thisday of, 2007 sinek, known to me to be the person whose name is and acknowledged to me that he/she executed the same of and consideration therein expressed.
[SEAL]	Notary or Consular Officer
Signature:Name: Noaki Agata	Date:
personally appeared Naoki Agata, kno	ed authority, on this <u>day of</u> , 2007 wa to me to be the person whose name is subscribed to the ed to me that he/she executed the same of his/her own free therein expressed.
	Witness

Signature: Rala Land

Date: 6/02/08

Name: Surender Kharbanda

STATE OF MASSACKUSALLS
COUNTY OF SUPPORTE

BEFORE ME, the undersigned authority, on this Wday of Qune, 2008 personally appeared Surender Kharbanda, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

Dunney Jewe Notary or Consular Officer

[SEAL]

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ERLANDE K. JEAN-LOUIS
NOTARY PUBLIC
COMMONWEALTH of MASSACHUSETTS
MY COMMISSION EXPIRES
DECEMBER 11, 2009